Chapter 6

Historically Black Colleges and Universities

Highlights . . .

- In 1996, the 68 research-performing Historically Black Colleges and Universities (HBCUs) contained 2.4 million net assignable square feet (NASF) of science and engineering (S&E) research space; 29 percent of this space was designated for biomedical research.
- Sixty-seven percent of biomedical research space located in HBCUs was dedicated to the biological sciences and 33 percent was dedicated to the medical sciences.
- Five HBCUs started construction projects, totalling \$685,000 in fiscal years 1994-1995. Repair/renovation projects totalled \$6.9 million in that same time period.

Data Considerations

The National Advisory Committee on Black Higher Education and Black Colleges and Universities identifies 107 higher education institutions that are considered to be Historically Black Colleges and Universities (HBCUs), "institutions established prior to 1964, whose principal mission was, and is, the education of black Americans." Of this group, 29 reported separately budgeted research expenditures in 1988, the year in which the first full-scale facilities survey was conducted by the National Science Foundation (NSF). All of these institutions were included in the 1988 and subsequent samples. In 1992, NSF identified an additional 41 HBCUs that had separately budgeted research and development (R&D) expenditures. Since 1992, the survey sample included the original panel of 29 institutions and the additional 41 for a total of 70 research-performing HBCUs. As a result, two sets of estimates for HBCUs can be presented — one for the 29 panel institutions and one for all 70 research-performing HBCUs.

Given the relatively small number of HBCUs that have been part of the sample since 1988, fluctuations across time periods can result from a change in one or two institutions.

Findings

Research Facilities in 1996

In 1996, the 68 research-performing HBCUs contained 2.4 million NASF of S&E research space; 700,000 NASF (29 percent) of this space was designated for biomedical research (Table 6-1).

Of the 700,000 NASF of biomedical research space located at HBCUs, 77 percent was dedicated to biological sciences research, with the remainder dedicated to medical sciences research. HBCU biomedical research space was located primarily at HBCU colleges and universities, 67 percent; 33 percent of the space was located at medical schools at HBCUs.¹

Slightly over a third, 36 percent, of HBCU biomedical research space was rated as being suitable for use in the most competitive scientific research. This is a little less than the percent rated in this condition by all academic institutions, 41 percent. HBCUs rated only 8 percent of all biomedical

¹It should be noted that only three HBCUs had medical schools.

research space as needing major renovation or replacement; academic institutions rated 18 percent of the biomedical research space in this condition.

Table 6-1
Amount, condition, and adequacy of research space at Historically Black
Colleges and Universities (HBCUs) in comparison to all
academic institutions: 1996

INDICATOR	HBCUs	All academic institutions					
Number of institutions	68	560					
Amount of research space (NASF in millions):							
All S&E fields	2.4	136					
Biomedical sciences, total Colleges and universities Biological sciences Medical sciences Medical schools Biological sciences Medical sciences Medical sciences	.70 .47 .39 .08 .23 .15	54.6 26.1 18.7 7.4 28.5 10.8 17.7					
Condition of existing biomedical research space (percentage of space):							
Total	100%	100%					
Suitable for use in the most sophisticated scientific research Effective for most uses but not the most sophisticated Requires major repair/renovation or replacement to be used effectively	36 55 8	41 41 18					
Adequacy of current amount of biomedical research space (percentage of institutions):							
Total	100%	100%					
Sufficient to support needs of current biomedical research program commitments Not sufficient to support needs of current biomedical research program commitments	49 51	39 61					

¹This category includes all academic institutions with any S&E research space. It is not restricted to institutions with biomedical research space.

KEY: NASF = Net assignable square feet

S&E = Science and engineering

NOTE: Because of rounding, components may not add to 100.

SOURCE: National Institutes of Health, The Status of Biomedical Facilities: 1996, Bethesda, MD, 1997

Just over half of the HBCUs (51 percent) reported that the current amount of biomedical research space was not sufficient to support the needs of their current biomedical research program commitments.

The 68 research performing HBCUs reported little recent or upcoming activity to expand, upgrade, or maintain their biomedical facilities. Five HBCUs started biomedical research construction projects in fiscal years 1994-1995 (Table 6-2). (Three HBCUs reported construction projects for the 1992-1993 fiscal years.) Three HBCUs started repair/renovation activities in fiscal years 1994-1995, while five were scheduled to start construction and six were scheduled to start repairs in fiscal years 1996-1997.

Table 6-2
Biomedical research facility construction and repair/renovation activity at Historically Black Colleges and Universities (HBCUs) in comparison to all academic institutions: 1994-1995¹

INDICATOR	HBCUs	All academic institutions
Number of institutions	68	539
Construction projects, 1994-1995:		
Number of institutions with projects ≥ \$100,000 Expected cost (current dollars in millions) Research NASF (in thousands) to be created	5 .685 7.8	109 1,261 3,689
Sources of funds (percentage of total cost)		
Federal Government State/local government Private donations Institutional funds Debt financing Other	70 7 0 23 0	4 49 9 26 11
Scheduled construction projects, 1996-1997:		
Number of institutions planning projects ≥ \$100,000 Expected cost (current dollars in millions) Research NASF (in thousands) to be created	5 22 75	110 1,636 5,244
Repair/renovation projects, 1994-1995:		
Number of institutions with projects ≥ \$100,000 Expected cost (current dollars in millions) Research NASF affected (in thousands)	3 6.9 68	231 513 6,248
Scheduled repair/renovation projects, 1996-1997:		
Number of institutions planning projects ≥ \$100,000 Expected cost (current dollars in millions) Research NASF affected (in thousands)	6 3.9 76	208 559 6,988

¹Findings are limited to projects with estimated total cost at completion of \$100,000 or more for research space. Estimates are prorated to reflect research components only.

KEY: NASF = Net assignable square feet

SOURCE: National Institutes of Health, The Status of Biomedical Facilities: 1996, Bethesda, MD, 1997

In fiscal years 1994-1995, the five HBCUs with biomedical construction projects spent \$685,000. All academic institutions spent \$1.3 billion on biomedical research construction.

A vast majority of the funds to construct new biomedical research space in the HBCUs was provided by the Federal government, 70 percent. Another 23 percent came from institutional funds. The remaining funds came from state and local governments.

Trends in Research Facilities

A panel of 29 HBCUs completed the survey every two years since its first administration in 1988. These 29 institutions include all five of the largest institutions in terms of S&E research expenditures and offer a means to examine capital project trends dating from 1986.

Construction and repair/renovation project starts in the biomedical sciences were markedly down since fiscal years 1986-1987. New construction decreased from eight institutions starting projects in 1986-1987 for \$42 million (in 1995 constant dollars) to one start in 1994-1995 for \$.2 million (Table 6-3).

Likewise, the number of institutions starting repair/renovation projects was down since 1986-1987. In 1994-1995, only two HBCUs started repair/renovation projects versus seven that started them in 1986-1987. However, these two institutions reported spending \$6.8 million for these projects. In 1992-1993, three of the HBCUs indicated spending \$2 million. Thus, the repair/renovation projects to biomedical research space in 1994-1995 appear to be much larger in size than those undertaken in the previous two fiscal years.

Table 6-3
Trends in biomedical research facility construction and repair/renovation activity at historically black colleges and universities (HBCUs): 1986-1995

INDICATOR	1986-1987	1988-1989	1990-1991	1992-1993	1994-1995
Number of institutions ¹	29	29	29	29	29
Construction projects: ²					
Number of HBCUs with projects ≥ \$100,000 Expected cost (dollars in millions)	8 \$42	4 \$19	2 \$13	4 \$0.6	1 \$.2
Repair/renovation projects: ²					
Number of HBCUs with projects ≥ \$100,000 Expected cost (dollars in millions)	7 \$9	6 \$10	3 \$4	3 \$2	\$6.8

¹Estimates refer to the 29 comparatively large HBCUs that were first surveyed in 1988.

KEY: NASF = Net assignable square feet

NOTE: Because of rounding, components may not add to 100.

Current dollars have been adjusted to 1995 constant dollars using the Bureau of the Census' Composite Fixed-Weighted Price Index

for Construction.

SOURCE: National Institutes of Health, The Status of Biomedical Facilities: 1996, Bethesda, MD, 1997

²Findings are limited to projects with estimated total cost at completion of \$100,000 or more for research space. Estimates are prorated to reflect research components only.